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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,780	02/18/2004	Richard DeGreef	MEW-105-A	2145
32856	7590	11/08/2005		
WEIDE & MILLER, LTD. 7251 W. LAKE MEAD BLVD. SUITE 530 LAS VEGAS, NV 89128			EXAMINER ADDIE, RAYMOND W	
			ART UNIT 3671	PAPER NUMBER

DATE MAILED: 11/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding. -

Office Action Summary	Application No. 10/780,780	Applicant(s) DEGREEF, RICHARD	
	Examiner Raymond W. Addie	Art Unit 3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 10 is rejected under 35 U.S.C. 102(e) as being anticipated by Knak et al. #

2003/0147693 A1.

Knak et al. # 2003/014693 in view of Spiess et al. # 5,340,232.

Knak et al. discloses a mechanism for removably locking a sewer grate (12) within its mounting frame (14), which has a ledge structure (28) and a downwardly extending side wall (32) below said ledge structure (28). Said locking mechanism comprising:

A nut retainer (34) affix able to the frame sidewall (32).

A threaded nut (38) carried by said nut retainer (34).

A grate hold-down means (60) extending downwardly through said grate.

A bolt (36) extendable downwardly through and having its head engaged with said hold-down means (60), so that said bolt is in threaded engagement with the nut (38).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Knak et al. # 2003/014693 in view of Spiess et al. # 5,340,232.

Knak et al. discloses a mechanism for removably locking a sewer grate (12) within its mounting frame (14), which has a ledge structure (28) and a downwardly extending side wall (32) below said ledge structure (28). Said locking mechanism comprising:

A nut retainer (34) affix able to the frame sidewall (32).

A threaded nut (38) carried by said nut retainer (34).

A multi-apertured plate (40) disposed above the nut but below the grate (12), and
having at least one elongated slot, see Figs. 2, 7.

A plurality of upstanding suspension structures (44), carried by the plate (40).

A bolt (36) extendable downwardly through the apertured plate (40) into threaded
engagement with the nut (38).

Whereby, the plate is removably attached to the frame (14) as at (32), see Fig. 2; via the nut and associated nut retainer. What Knak et al. does not disclose is extending at least one of the upstanding members (44) to at least partially overlap a one of the grate bars (16, 18).

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However, Spiess et al. teaches a locking device (4), for a sewer grate (3) mounted on a frame (1) having a ledge structure (5a) and a downwardly extending side wall (see Figs. 5b, 5e, 10).

Said locking device comprising:

A plate (4) capable of at least partially encircling at least one of the grate bars, and a sidewall of said frame (1).

Whereby the plate is attached to the grate; and connecting the grate to the frame in a removably, locking fashion.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the sewer grate locking assembly of Knak et al., with a grate connecting plate, as taught by Spiess et al., in order to make the grate more tamper resistant. See Knak et al. cols. 3-4; Figs. 2, 7; Spiess et al., Figs. 4-8, 10.

In regards to claims 2-3 Knak et al. discloses attaching the grate to locking device via a bolt (36), Para. [0030], but does not disclose the shape of the bolt head. However, it would have been obvious to one of skill in the art to choose a bolt, with any of a variety of head patterns i.e. Phillips head, Torx head etc., solely based on the perceived threat of tampering. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the locking mechanism of Knak et al. in view of Speiss et al., with a tamper-resistant bolt head, as reasonably suggested by Knak et al., see Para. [0005-0006].

3. Claims 4, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knak et al. # 2003/014693 in view of Spiess et al. # 5,340,232 as applied to claim 4 above, and further in view of Sharpless # 5,849,198.

Knak et al. in view of Spiess et al. clearly illustrate a vast assortment of locking plates (4), having different and equivalent configurations, see Figs. 1b-10, for removably securing the sewer grate (3) to a support frame (1). Further, Sharpless teaches the use of a grate-supported suspension clip (52) that encircles adjacent grate bars (24) to attach the grate to manhole devices suspended below the road surface. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the locking sewer grate of Knak et al. in view of Spiess et al., with a double-legged suspension clip, as taught by Sharpless, in order to secure the grate to the suspended locking device.

4. Claims 1, 6, 7, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wyatt # 3,390,224 in view of Boersma # 4,655,913 and Knak et al. # 2003/014693. Wyatt discloses a mechanism (41) for removably locking a manhole lid (35) to a mounting frame having a ledge structure (corrugations), and a sidewall extending downwardly below the ledge structure.

Said locking mechanism comprising:

Angled members (40, 41) having vertical and horizontal leg elements (42/43), which have a threaded bore for receiving a bolt (45).

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What Wyatt does not disclose is how to attach a sewer grate lid having parallel bars to a manhole frame. However, Boersma teaches it is known to attach a sewer grate (12) to the sidewall of a mounting frame (P) by overlapping a horizontal leg (34) of an angled member (30) over the top of a spaced grate bar (24). Each of said grate bar (24) and horizontal leg (34) having apertures capable of receiving a bolt or pin. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to dispose the horizontal leg of the locking mechanism of Wyatt, over the top of a sewer grate bar, as taught by Boersma, in order to securely attach the grate to the mounting frame. See Boersma Figs. 1-4; col. 2.

Although Wyatt in view of Boersma disclose using an angled member to attach a manhole lid to a mounting frame, utilizing a bolt and threaded aperture in the angled member, Wyatt in view of Boersma do not disclose the use of a nut and retainer for receiving said bolt. However, Knak et al. teaches it is known to attach sewer grates (12) to manhole frames (14) either single locking bars (70) or equivalently by a plurality of nut retainers (34), each embodiment capable of receiving a locking bolt through the grate (12). The nut retainers further comprising a bolt receiving nut (38) disposed below an apertured plate (40) and a pair of upstanding suspension structures (44), capable of being affixed to a sidewall of the frame (14), via a protruding flange member (32).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the manhole locking lid assembly of Wyatt in view of Boersma, with a nut and retainer locking assembly, as taught by Knak et al., in order to replace or reinforce worn threaded apertures in known locking devices.

5. Claims 8, 12, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wyatt # 3,390,224 in view of Boersma # 4,655,913 and Knak et al. # 2003/014693, as applied to claim 8 above, and further in view of Lukomski # 2,190,532.

Wyatt in view of Boersma and Knak et al. disclose essentially all that is claimed, to include a plurality of angled members (40, 41) affixed to the sidewall of the manhole frame. What Wyatt in view of Boersma and Knak et al. do not disclose is affixing the angled member to the side frame via a pin and hole extending through the sidewall. However, Lukomski teaches an adjustable sewer grate (10) mounted to a frame (5) extending downwardly below a ledge member (8). The grate being affixed to the mounting frame via a holes and pins (13, 16) respectively, the pin assembly permitting limited adjustment of the sewer grate (10). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to affix the sewer grate of Wyatt in view of Boersma and Knak et al., to the sidewall of the manhole frame, via a pin and hole assembly, as taught by Lukomski, in order to selectively adjust the position of the sewer grate. See Lukomski Figs. 1, 2; Col. 2.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knak et al. 2003/0147693 A1 in view of Sharpless # 5,849,198.

Knak et al. discloses a mechanism for removably locking a sewer grate (12) within its mounting frame (14), as put forth with respect to claim 10 above; but Knak et al. does not disclose is extending at least one of the upstanding members (44) to at least

partially encircle adjacent grate bars (18). Sharpless teaches the use of a grate-supported suspension clip (52) that encircles adjacent grate bars (24) to attach the grate to manhole devices suspended below the road surface. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the locking sewer grate of Knak et al. with a double-legged suspension clip, as taught by Sharpless, in order to secure the grate to the suspended locking device.

Response to Arguments

7. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any


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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond W. Addie whose telephone number is 571 272-6986. The examiner can normally be reached on 6AM-2:00PM.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 571 272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Raymond Addie
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Group 3600

11/04/05